



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/541,454

07/06/2005

Kohshi Yoshimura

050431

8215

23850 7590 05/06/2011  
KRATZ, QUINTOS & HANSON, LLP  
1420 K Street, N.W.  
4th Floor  
WASHINGTON, DC 20005

EXAMINER

LOUIE, MANDY C

ART UNIT

PAPER NUMBER

1715

MAIL DATE

DELIVERY MODE

05/06/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/541,454	<b>Applicant(s)</b> YOSHIMURA ET AL.	
	<b>Examiner</b> MANDY C. LOUIE	<b>Art Unit</b> 1715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 12-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashizume [JP 10-168339] in view of Schnelder [US 20020160231] in view of Jaffe [US 4478968].

Regarding claim 12, Hashizume teaches a method forming colored magnetic metal flake (magnet powder) [title] with a coating comprising an organic pigment such as phthalocyanine pigment (adhesion layer containing organic pigment as a primary component) comprising the steps of mixing the magnet powder (exemplified having a diameter of 150 micrometers or less, 0012) with a solution containing an organic pigment (exemplified having an average primary (major axis) particle diameter of 0.01 – 1 micrometers, 0019) as taught in paragraph 0040 (slurry was formed of permalloy flake, color pigment, and mineral spirit), and then drying the magnet powder having adhered to the surface thereof the treating solution containing the organic pigment (heating evaporation of the solvent) [0040].

Although the prior art does not explicitly teach the major axis diameter being the claimed ranges, it would have been obvious to one of ordinary skill in the art that the diameter of coin-like flakes (circular particles) would be the same in either the major or minor axis direction (i.e. if the diameter of the circular particle is about 80 micrometers the major axis diameter would also be about 80 micrometers). Furthermore, the pigment/binder coated magnetic particle would innately be oxidation-resistant due to the nature of a coating existing on the magnetic particle. And even though Hashizume does not teach the exact claimed ranges, a *prima facie* case of obviousness exists when the prior art “overlap or lie inside ranges disclosed by the prior art”. (See MPEP 2144.05.I).

However, Hashizume appears to be silent in teaching the magnet powder is an earth metal containing magnet powder, Schneider helps remedies this.

Regarding claim 12, Schneider is directed to magnetic signs or cards [0002-0004] as does Hashizume [0001], wherein Schneider teaches magnetic particles having high magnetization and high coercivity is preferred and exemplifies ALNICO and rare earth magnetic materials as obvious variant materials for magnetic products, which ALNICO is an exemplified magnetic metal in Hashizume [0014]. It would have been obvious to one of ordinary skill in the art to use a rare earth containing magnetic powder with the method taught by Schneider with reasonable expectation of success since Schneider teaches such metal powder would be obvious over ALNICO.

However, Hashizume and Schneider do not disclose mixing the rare earth powder and organic pigment with a weakly alkaline water that is controlled to a range of 6.5 to 9.0. Jaffe remedies this.

Regarding claim 12, Jaffe drawn to preparing an organic pigment [abstract] teaches by adding basified water to the pigment solution will improve dispersion of the pigment, wherein the pH can be controlled at PH 7-14 [col 2, ln 15-40]. It would have been obvious to one of ordinary skill in the art to expose the organic pigment to alkaline water at the claim ranged as taught by Jaffe. One would have been motivated to do so in order to improve dispersion and the wetting properties of the pigment [col 2, ln 15-19, ln 55].

Regarding claim 13, the prior art teaches the method further comprises after mixing step and before the drying step, a step of obtaining by filtration of the magnetic powder (suction filtration) [Hashizume 0040] wherein it would have been obvious that some of the solution (slurry) would have adhered to the surface of the powder since the filtration is performed prior to the evaporation of the solvent.

Regarding claim 14, the prior art teaches the pigment content may range from 1-100 weight section of the magnetic powder [Hashizume, 0015]. Although the prior art does not explicitly teach the claimed range for the pigment concentration, it would have been obvious to one of ordinary skill in the art to optimize the concentration as a workable parameter so as to control the tinting of the magnetic particles while reducing the omission of a color pigment [Hashizume, 0015].

Regarding claim 15, the prior art teaches the treating solution containing the organic pigment comprises an organic medium (mineral spirit) [Hashizume, 0040]

Regarding claim 16, teaching of Hashizume in view of Schneider of claim 12 is further applied to claim 16, wherein the prior art teaches at least one layer of coating is

Art Unit: 1715

formed on the powder surface by the treating solution, which would innately be on the outermost surface of the powder.

### ***Response to Arguments***

Rejections under 35 USC 112, second paragraph have been withdrawn due to applicant's amendments to claims 12-16.

Applicant's arguments filed on 01/21/11 with respect to claims 12-16 have been considered but are moot in view of the new ground(s) of rejection.

Arguments of Hasizume are moot since the applicant has amended the claims to recite pigments dispersed "in weakly alkaline water whose pH is controlled to a range of 6.5 to 9.0" which necessitated the new grounds of rejection with Jaffe as provided above.

### ***Conclusion***

1. No claim is allowed.
2. Claims 12-16 are rejected for the reasons aforementioned.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MANDY C. LOUIE whose telephone number is (571)270-5353. The examiner can normally be reached on Monday to Friday, 7:30AM - 5:00PM EST.

Art Unit: 1715

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571)272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. C. L./  
Examiner, Art Unit 1715

/Timothy H Meeks/  
Supervisory Patent Examiner, Art Unit 1715